What is claimed is:

1. A naturally encapsulated data storage apparatus for harsh environments comprising:

at least one electromechanical disk drive;

a volume of air captured at room temperature and pressure;

a sealed enclosure encapsulating the electromechanical disk drive and the volume of air at room temperature and pressure, the sealed enclosure consisting essentially of material flowed and hardened in one piece surrounding the electromechanical disk drive;

means for communicating data between the electromechanical disk drive and a controller located outside of the sealed enclosure.

2. The apparatus of claim 1 wherein the material:

is electrically non-conductive;

is thermally insulating due to a low rate of thermal absorption;

has low hygroscopic characteristics, including a very low rate of absorption and very low susceptibility to high moisture and corrosive environments;

exhibits a tensile strength of at least about 10,000 psi;

exhibits a flexural strength of at least about 14,000 psi; and

provides high frequency damping.

3. The apparatus of claim 1 wherein the apparatus is portable and disposable.

4. The apparatus of claim 1 wherein the electromechanical disk drive is non-accessible and non-repairable.

5. The apparatus of claim 1 wherein the electromechanical disk drive is counter-balance mounted to offset gyroscope upsets in zero-gravity environments.

6. The apparatus of claim 1 further comprising a lead based lining for operation in radiation prone environments.

7. The apparatus of claim 1 wherein the apparatus is operable while fully submerged in salt water.

8. The apparatus of claim 1 wherein the apparatus is operable at altitudes above about 70,000 feet above sea level.

9. The apparatus of claim 1 wherein the sealed enclosure is free of mechanical closure devices.

10. The apparatus of claim 1 further comprising a heat conduction plate extending from the electromechanical disk drive to and through the sealed enclosure.

11. The apparatus of claim 1 wherein the sealed enclosure forms a continuous three-dimensional shell.

12. The apparatus of claim 1 further comprising a means for warming the electromechanical disk drive to normal operating temperatures after the apparatus has been exposed to low temperatures for an extended period of time, the means for warming comprising:

means for inhibiting operation of the electromechanical disk drive when the electromechanical disk drive is outside of normal operating temperatures;

a heater for warming the electromechanical disk drive to achieve normal operating temperatures, the heater being mounted inside of the sealed enclosure; and

means for overriding the means for inhibiting operation of the electromechanical disk drive, the means for overriding being capable of selective actuation during critical conditions.

13. The apparatus of claim 1 further comprising a docking station capable of removably receiving the sealed enclosure and adapted to communicate with the electromechanical disk drive inside the sealed enclosure, the docking station comprising:

an isolation tray for reducing the magnitude of vibration and mechanical shock, thereby permitting operation of the apparatus during exposure to vibration and mechanical shock conditions normally harmful to commercial disk drives, and thereby permitting the electromechanical disk drive to survive vibration and mechanical shock conditions at levels normally fatal to disk drives;

an electrical mating connector operatively connected to the isolation tray to adequately provide connection to the sealed enclosure without compromising the integrity of the sealed enclosure;

a heat sink mounted on the isolation tray, the heat sink adapted to assist in dissipation of heat generated within the sealed enclosure and conducted to the exterior of the enclosure by thermal plates.

14. The apparatus of claim 1 wherein the means for communicating data is wireless.

15. The apparatus of claim 1 wherein the material comprises epoxy resin.

16. The apparatus of claim 1 wherein the electromechanical disk drive is a commercial off-the-shelf disk drive normally unreliable in harsh environments.

17. The apparatus of claim 1 further comprising at least a second electromechanical disk drive inside of the sealed enclosure.

18. A method of repeatedly collecting data from a harsh environment, the method comprising:

placing in the harsh environment a naturally encapsulated electromechanical disk drive having sides, a top, and a bottom, the naturally encapsulated electromechanical disk drive having been encapsulated with a volume of air captured in a first non-harsh environment at room temperature and pressure by flowing a fluid material completely around the sides, the top, and the bottom to form a one-piece volumetric shell;

inputting data into the electromechanical disk drive from the harsh environment while the electromechanical disk drive remains encapsulated inside the one-piece volumetric shell;

storing the data on a disk in the naturally encapsulated electromechanical disk drive while the electromechanical disk drive remains encapsulated inside the one-piece volumetric shell;

moving the naturally encapsulated disk drive and the disk from the harsh environment to a second non-harsh environment; and

communicating the data on the disk to the second non-harsh environment.

19. The method of claim 18 further comprising the step of discarding the naturally encapsulated electromechanical disk drive after one use, the one use comprising a single performance of the inputting, storing, moving, and communicating.

20. The method of claim 18 wherein the harsh environment comprises an aircraft flying up to and beyond 70,000 feet.

21. The method of claim 18 wherein the material comprises epoxy resin.

22. The method of claim 18 wherein the inputting and the communicating are accomplished via a standard electrical connector penetrating the one-piece volumetric shell without compromising the integrity of the sealed enclosure.

23. A method of encapsulating an electromechanical disk drive having sides, a top, and a bottom, the method comprising:

Surrounding the sides, top, and bottom, of the electromechanical disk drive with fluid material;

Solidifying the material surrounding the electromechanical disk drive to form a one piece capsule of solidified material, the one piece capsule of solidified material surrounding the sides, the top, and the bottom of the electromechanical disk drive; and

Sealing the electromechanical disk drive in the one piece capsule of solidified material.